


Please type a plus sign (+) inside ☒  ☒

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	NOVT 100
First Inventor	Carsten Sjoeholm
Title	USE OF ACID-STABLE SUBTILISIN PROTEASES IN ANIMAL FEED
Express Mail Label No.	EL 709 418 884 US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 54]  
*(preferred arrangement set forth below)*
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 3]
5. Oath or Declaration [Total Pages 3]
- a. ☒ Unexecuted
- b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 17 completed)
- i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application. see 37 CFR 1.63(d)(2) and 1.33(b)
6. ☒ Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:**Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☒ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
  - ii. ☒ paper
- c. ☒ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Other: Check for \$950.00

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

Prior application information: Examiner: \_\_\_\_\_ of prior application No. \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion of the disclosure is omitted from the submitted application parts.

**18. OFFICE ADDRESS**☒ (Indicate paper or Code label)**23579**

PATENT TRADEMARK OFFICE

Name	Patrea L. Pabst Arnall Golden & Gregory, LLP		
Address	2800 One Atlantic Center 1201 West Peachtree Street		
City	Atlanta	State	GA
Zip Code	30309-3450		

Signature

By signing this statement, the inventor(s) certifies that the information furnished in this application is true and correct to the best of his/her knowledge, belief, and opinion, and that the information is not false or misleading. The inventor(s) also certifies that the information is not prior art, and that the information is not derived from any other source. The inventor(s) further certifies that the information is not derived from any other source. The inventor(s) further certifies that the information is not derived from any other source.

# FEE TRANSMITTAL for FY 2001

*Patent fees are subject to annual revision*

**TOTAL AMOUNT OF PAYMENT** (\$950.00)

## Complete if Known

Application Number	
Filing Date	February 8, 2001
First Named Inventor	Carsten Sjoeholm
Examiner Name	
Group Art Unit	
Attorney Docket No	NOVT 100

### METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to

Deposit Account Number: 01-2507  
Deposit Account Name: Arnall Golden & Gregory, LLP

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

### FEE CALCULATION

#### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)		
101	710	201	355	Utility filing fee	710.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

**SUBTOTAL (1)** (\$ 710.00)

#### 2. EXTRA CLAIM FEES

Total Claims: 13 - 20 = 0  
Independent Claims: 6 - 3 = 3  
Multiple Dependent:   
Extra Claims: 0  
Fee from below: 80.00  
Fee Paid: 240.00

Large Entity		Small Entity		Fee Description
Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	
102	14	202	9	Claims in excess of 10
103	14	203	9	Independent claims in excess of 10
104	170	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2)** (\$ 240.00)

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Sheet	
581	40	581	40	Recording each patent assignment per property times number of properties	
148	11	248	5.5	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	219	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify):

**SUBTOTAL (3)** (\$)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Carsten Sjoeholm, Peter Rahbek Oestergaard, and Anna-Marie Klunter

Serial No.: Express Mail Label No.: EL 709 418 884 US

Filed: February 8, 2001 Date of Deposit February 8, 2001

For: USE OF ACID-STABLE SUBTILISIN PROTEASES IN ANIMAL FEED

BOX PATENT APPLICATION

Assistant Commissioner for Patents

Washington, D.C. 20231

**EXPRESS MAIL TRANSMITTAL LETTER  
FOR PATENT APPLICATION AND CERTIFICATE OF MAILING**

Sir:

Pursuant to 35 U.S.C. § 21(a) as amended by Public Law 97-247 and 37 C.F.R. § 1.10, applicants enclose for filing the attached patent application entitled "*Use of Acid-Stable Subtilisin Proteases in Animal Feed*", which claims priority to U.S.S.N. 60 183,133 filed February 17, 2000, which claims priority to foreign application No. 2000 00200 filed in Denmark on February 8, 2000. The application includes 1 page of Abstract, 51 pages of specification, 2 pages of claims, 3 sheets of informal drawings, a 3-1/2 inch sequence listing diskette, a paper copy of the sequence listing, an unexecuted Declaration for Patent Application, and an unexecuted Power of Attorney or Authorization of Agent. An executed Declaration for Patent Application, Power of Attorney or Authorization of Agent, and Assignment to

Title: *Use of Acid Stable Subtilisin Proteases in Animal Feed*  
Filed: February 8, 2001  
Express Mail Transmittal Letter for  
Patent Application and Certificate of Mailing  
Express Mail Label No. 41 799 418 884 US  
Date of Deposit: February 8, 2001

A Preliminary Amendment is enclosed.

This application contains nucleic acid and or protein sequences as defined in 37 C.F.R. §§ 1.821-1.825. Pursuant to 37 C.F.R. §§ 1.821-1.825, applicants enclose a 3 1/2" diskette containing a computer-readable form of the Sequence Listing for the above-identified application. A paper copy of the Sequence Listing is incorporated into the application.

I declare that the material on the diskette is identical to the paper copy of the Sequence Listing present in the above-identified application, and that all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

A check in the amount of \$950.00 to cover the filing fee is enclosed. It is believed that \$950.00 is the proper filing fee for a large entity, as the application includes 6 independent claims and a total of 13 claims after entry of the enclosed Preliminary Amendment.

The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment to Deposit Order Account No. 01-2507. To facilitate this process, applicants have enclosed a duplicate of this letter.

This application is being filed on February 8, 2001 by mailing the application to the Assistant Commissioner for Patents, Washington, D.C. 20231 via the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10. The Express

Title: *Use of Acid Stable Subtilisin Proteases in Animal Feed*  
Filed: February 8, 2001  
Express Mail Transmittal Letter for  
Patent Application and Certificate of Mailing  
Express Mail Label No. 41 09418 884 US  
Date of Deposit: February 8, 2001

Mail label number appears in the heading of this paper which is attached to the application papers pursuant to 37 C.F.R. § 1.10(b).

All correspondence concerning this application should be mailed to:

Patrea L. Pabst, Esq.  
ARNALL GOLDEN & GREGORY, LLP  
2800 One Atlantic Center  
1201 West Peachtree Street  
Atlanta, Georgia 30309-3450

Respectfully submitted,

---

Patrea L. Pabst  
Reg. No. 31,284

Date: February 8, 2001

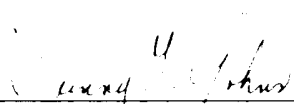
ARNALL GOLDEN & GREGORY, LLP  
2800 One Atlantic Center  
1201 West Peachtree Street  
Atlanta, Georgia 30309-3450  
(404) 873-8794  
(404) 873-8795 Telefax

Title: *Use of Acid Stable Subtilisin Proteases in Animal Feed*  
Filed: February 8, 2001  
Express Mail Transmittal Letter for  
Patent Application and Certificate of Mailing  
Express Mail Label No. EL 709 418 884 US  
Date of Deposit: February 8, 2001

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10**

I hereby certify that this Express Mail Transmittal Letter for Patent Application and Certificate of Mailing and any documents referred to as attached therein are being deposited with the United States Postal Service on this date, February 8, 2001, in an envelope as "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, mailing label number EL 709 418 884 US, addressed to BOX PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231.

Date: February 8, 2001

  
\_\_\_\_\_  
Sunny G. Johns

2000 - 01145 - 01

BUDAPEST TREATY ON THE INTERNATIONAL  
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS  
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

GC987 U.S. PTO

09/779334



Novo-Nordisk a/s  
Postbox 3000  
2880 BAGSVAERD  
Denemarken

name and address of depositor

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT  
issued pursuant to Rule 7.1 by the  
INTERNATIONAL DEPOSITARY AUTHORITY  
identified at the bottom of this page

I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the  
DEPOSITOR:  
NN048145

Accession number given by the  
INTERNATIONAL DEPOSITARY AUTHORITY:  
CBS 102448

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I above was accompanied by:

- ☐ a scientific description  
☒ a proposed taxonomic designation  
(mark with a cross where applicable)

III. RECEIPT AND ACCEPTANCE

This International Depositary accepts the microorganism identified under I above, which  
received by it on 17-01-2000 (date dd-mm-yy of the original deposit) 1

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I above was received by this International Depositary  
Authority on not applicable (date dd-mm-yy of the original deposit) and a  
request to convert the original deposit to a deposit under the Budapest Treaty was received  
by it on not applicable (date dd-mm-yy of receipt of request for conversion)

V. INTERNATIONAL DEPOSITARY AUTHORITY

Name: Centraalbureau voor Schimmelcultures

Address: Oosterstraat 1  
P.O. Box 273  
3740 AG BAARN

Signature(s) of person(s) having the power  
to represent the International Depositary  
Authority or of authorized official(s):

Mrs F. B. Snippe-Claus

Dr J. A. Stalpers

01-02-2000

2000-01145-01

BUDAPEST TREATY ON THE INTERNATIONAL  
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS  
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

Novo-Nordisk a/s  
Postbox 3000  
2880 BAGSVAERD  
Denemarken

*name and address of the party to whom the  
viability statement is issued*

VIABILITY STATEMENT  
issued pursuant to Rule 10.2 by the  
INTERNATIONAL DEPOSITARY AUTHORITY  
identified on the following page

<b>I. DEPOSITOR</b>	<b>II. IDENTIFICATION OF THE MICROORGANISM</b>
Name: Novo-Nordisk a/s  Address: Postbox 3000 2880 BAGSVAERD Denemarken	Accession number given by the INTERNATIONAL DEPOSITARY AUTHORITY:  CBS 102448  Date (dd-mm-yy) of the deposit or of the transfer: 1 17-01-2000
<b>III. VIABILITY STATEMENT</b>	
The viability of the microorganism identified under II above was tested on 21-01-2000 2. On that date (dd-mm-yy), the said microorganism was  <input checked="checked" type="checkbox"/> <sup>3</sup> viable  <input type="checkbox"/> <sup>3</sup> no longer viable	

<sup>1</sup> Indicate the date of the original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

<sup>2</sup> In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

<sup>3</sup> Mark with a cross the applicable box.



IV. CONDITIONS UNDER WHICH THE VIABILITY HAS BEEN PERFORMED

4

V. INTERNATIONAL DEPOSITARY AUTHORITY

Name: Centraalbureau voor Schimmelcultures

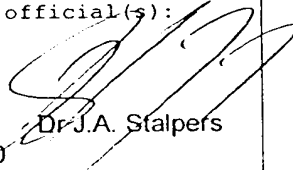
Address: Oosterstraat 1  
P.O. Box 273  
3740 AG BAARN  
The Netherlands

Signature(s) of person(s) having the power  
to represent the International Depositary  
Authority or of authorized official(s):



Mrs F.B. Snippe-Claus

Date (dd-mm-yy): 01-02-2000



Dr J.A. Stalpers

<sup>4</sup> Fill in if the information has been requested and if the results of the test were negative.